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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,410	01/05/2005	Yosuke Egawa	040707	2961
23850	7590	09/12/2007		
KRATZ, QUINTOS & HANSON, LLP			EXAMINER	
1420 K Street, N.W.			TOSCANO, ALICIA	
Suite 400				
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			1712	
			MAIL DATE	DELIVERY MODE
			09/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/519,410	Applicant(s) EGAWA, YOSUKE	
	Examiner Alicia M. Toscano	Art Unit 1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Certified translation of the foreign priority received. Effective filing date is 7/8/02. The Examiner thusly withdraws the previous rejection and sets forth new grounds below.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-8, 10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada (US 6326440) in view of Obuchi (JP 2001-049098).

Terada discloses biodegradable films comprising polylactic acid and polyesters. Said composition comprises 80-20% polylactic acid and 20-80% polyester (abstract). Terada further discloses the use of a polyester which has a Tg of less than 0C in order to improve shock and cold resistance (Column 5 Lines 15-17). Terada discloses the thickness of the film to be around 40 micrometers (Column 8 Line 66) however Terada does not include the use of a film thickness of between 100 and 500 microns, as further required by Claim 1.

Obuchi discloses resin compositions comprising a blend of polyester elastomers and polylactic acid (abstract), a composition similar to that of Terada. Said blend is used for various films [0051]. Obuchi discloses the use of films which have a thickness which ranges from 5-1000 microns. The thickness is chosen depeding on the desired end use, wherein a thinner film has more flexibility and can be used for shopping bags,

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garbage bags and the like [0051] and a thicker film can be used for lunch containers, forks, spoons, bottles and the like [0052]. The choice of thickness will result in optimum properties for the intended use.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Terada the use of a film thickness range of 5-1000 microns, as taught by Obuchi, in order to form the desired products with superior properties. As the compositional elements are met it is the Examiners position that the crystallization of 45% or less are inherent, thusly all the limitations for claim1 are met.

Further, in claims 1-6 and 12-15, the recitation "for molding" has been given little patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the instant case, the preamble merely recites the intended use of the composition, wherein the prior art can meet this future limitation by merely being capable of such intended use.

As the compositional requirements are met the Examiner finds the T<sub>m</sub>, degree of crystallization and volume reduction ratio to be inherent in the claims. Thusly, Terada and Obuchi meet the limitations of Claim s 1-6 and 12-15.

Terada does not disclose molded articles from the biodegradable film as further required by Claims 7, 8 and 10. The film of Terada has superior physical properties such as biodegradability and heat sealability.

Obuchi discloses film resins as set forth above. Said films are further molded by vacuum forming, blow processing and the like [0060]. The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See also, *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) wherein the selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious. As such it would have been obvious to one of ordinary skill in the art at the time of the invention to include in Terada the use of the film for vacuum forming, blow processing and the like, as taught by Obuchi, in order to form molded objects with superior biodegradability and heat sealability.

As the compositional requirements are met the Examiner finds the volume reduction ratio of 6% or less to be inherent in Claims 5, 7 and 8, thusly all the limitations of said claims are met.

3. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada and Obuchi in further view of Obuchi (US 2002/0002252).

Terada and Obuchi include elements of the invention as set forth above. Terada and Obuchi do not disclose post crystallization of the molded article, as further required by the above claims.

Obuchi '252 discloses a process for preparing formed items from polyester resins. Said items may be crystallized after processing (abstract). Obuchi '252 discloses that increasing the crystallinity improves the thermal resistance of the item [0015]. Post crystallization is carried out at a temperature in between the glass transition temperature and the melting point of the composition [0137].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Terada and Obuchi the use of post crystallization, as taught by Obuchi '252, in order to improve the thermal resistance of the molding article. Since the compositional elements are met it is the Examiner's position that the volume reduction ratio is inherently met by Terada/Obuchi and Obuchi '252.

### ***Conclusion***

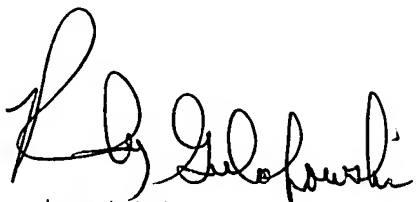
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT



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